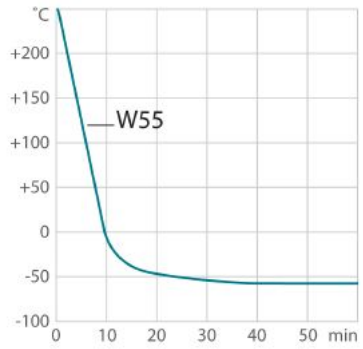
PRESTO W55 Process system

The powerful W55 regulates temperatures with high precision and convinces with faster cool-down and heat-up times. It is ideal for use in large external applications such as reactor temperature control, material stress testing or temperature simulation.

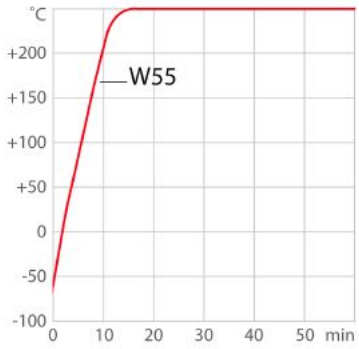
Product features

- For highly precise, external temperature applications
- Rapid heating and cooling
- Wide working temperature ranges without changing fluids
- Highest performance with small footprint
- Space-saving design optimizes space utilization in your lab
- Pump pressure up to 3.2 bar, max. flow rate 76 l/min
- Temperature stability ±0.05 °C ... ±0.1 °C
- 5,7” industrial color TFT touch screen
- Connections for USB, Ethernet, RS232, and Alarm output
- Modbus
- SD-Card slot
- Analog connections, RS485, Profibus DP (accessory)
- Second external Pt100 sensor connection (accessory)

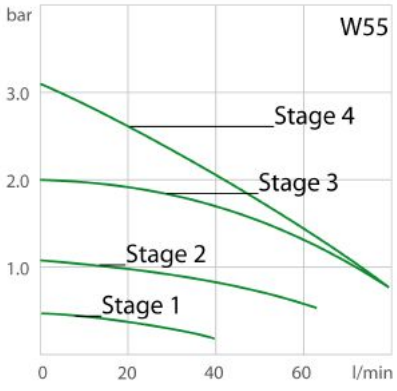
Cool-down time



Heat-up time



Pump capacity



Performance values

230V/3PPE/60Hz (Without Plug)	
Heating capacity kW	15
Viscosity max. cST	50
Pump capacity flow rate l/min	35 ... 80
Pump capacity flow pressure psi	7 ... 46.4
Power A	51

Order No.	9421552.16						
Cooling capacity 1 (Ethanol)							
°C	20	0	-10	-20	-30	-40	-50
kW	15	10	6.5	4	2.5	1.2	0.3

*Performance specifications measured in accordance with DIN12876. Cooling capacities up to 20 °C measured with ethanol; over 20 °C with thermal oil unless otherwise specified. Performance specifications apply at an ambient temperature of 20 °C. Performance values may differ with other bath fluids.

Refrigerant stage 1	
Refrigerant	R452A
Filling volume g	1600
Global Warming Potential for R452A	2140
Carbon dioxide equivalent t	3.424

208V/3PPE/60Hz (Without Plug)	
Heating capacity kW	12.5
Viscosity max. cST	50
Pump capacity flow rate l/min	35 ... 80
Pump capacity flow pressure psi	7 ... 43.5
Power A	48

Order No.	9421552.16						
Cooling capacity 1 (Ethanol)							
°C	20	0	-10	-20	-30	-40	-50
kW	15	10	6.5	4	2.5	1.2	0.3

*Performance specifications measured in accordance with DIN12876. Cooling capacities up to 20 °C measured with ethanol; over 20 °C with thermal oil unless otherwise specified. Performance specifications apply at an ambient temperature of 20 °C. Performance values may differ with other bath fluids.

Refrigerant stage 1	
Refrigerant	R452A
Filling volume g	1600
Global Warming Potential for R452A	2140
Carbon dioxide equivalent t	3.424

Technical data

Available voltage versions	
Order No.	9 421 552
Available voltage versions:	
9421552.16	208-230V/3PPE/60Hz (Without Plug) (R452A)
9421552.07	400V/3PNPE/50Hz (Plug 32A CEE) (R452A)

Cooling	
Cooling of compressor	1-stage Water
Cooling water temperature max. °C	35
Cooling water pressure max. psi	87
Cooling water difference pressure psi	7.3
1.0Cooling water consumption l/min	2 ... 12

9421552.S1.07	400V/3PNPE/50Hz (Plug 32A CEE) (R449A)

Other

Sound pressure level dbA	65
Classification	Classification III (FL)
IP Code	IP 20
Pump type	Centrifugal Pump

Electronics

Digital interface	RS232, RS485 optional, Profibus optional, SD memory card, USB, Ethernet, Modbus, Alarm output, Reg/Eprog optional, Standby-Input optional
External pt100 sensor connection	integrated
2nd external Pt100 sensor connection	accessory
Integrated programmer	8x60 steps
Temperature control	ICC
Absolute temperature calibration	3 Point Calibration
Temperature displayTemperature display	5.7" TFT Touchscreen
Temperature settingTemperature setting	Touchscreen

Dimensions and volumes

Internal usable expansion volume l	7.5
Minimal process volume l	11.5
Active heat exchanger volume l	7
Weight lbs	634.9
Cooling Water Connection in	G¾
Dimensions in. (W × L × H)	24 x 33.3 x 49.2
Pump connections	M30x1.5 male

Temperature values

Setting the resolution of the temperature display °C	0.01
Working temperature range °C	-55 ... +250
Temperature stability °C	±0.05 ... ±0.1
Ambient temperature °C	+5 ... +40
Temperature display resolution °C	0.01

All Benefits

Touch display. Perfect operation.
With the touch display, the user always has an overview of all values and functions. The intuitive and multilingual menu structure enables perfect control.

Convenience for several users
Administrator level for customizing instrument settings, user levels with limited permissions for fast and safe defined access, password protection, all levels adjustable

100 % Cooling capacity
'Active Cooling Control' for cooling available throughout the entire working temperature range, fast cool-down even at higher temperatures

Intelligent temperature control.
Intelligent cascade control - automatic and self-optimizing adaptation of the PID control parameters with external stability of +/- 0.05 °C.

Full control
'Temperature Control Features', for individual optimization, access to all important control parameters, additional settings for band limit, limits, co-speedfactor etc.

Control of the external application
External Pt100 sensor connection for precise measurement and control directly in the external application

Highest measuring accuracy
'Absolute Temperature Calibration' for manual compensation of a temperature difference, 3-point calibration

Intelligent pump system
Reliable and consistent pump capacity, electronically adjustable pump stages or pressure value, automatic adjustment of pump capacity to viscosity

Many interfaces.
Straight-forward remote control, data management, and integration into process structures. USB, Ethernet, RS232, SD card, and alarm off are permanently integrated. Further interfaces available as accessories.

Space-saving footprint
All connections as well supply and exhaust air are located at the front or rear, no venting grids on the sides, units can be placed close to each other or the application

Continuous operation up to +40 °C
Robust temperature control instrument, continuous operation even at ambient temperatures of up to +40 °C

Maximum safety.
Classification III according to DIN12876-1 enables safe operation, even with flammable fluids. Automatic switch-off in the event of high temperature or low liquid level.

Duplicate safety
Adjustable high temperature cut-off for internal tank and for integrated expansion vessel

For flammable bath fluid
Classification III (FL) according to DIN 12876-1

Quick support
If an error occurs, the integrated Black-Box function permits fast diagnosis by the JULABO service team

100% Checked.
100% testing. 100% quality. Each JULABO Circulator undergoes thorough quality testing before leaving the factory.

Green technology.
Development consistently applied environmentally friendly materials and technologies.

JULABO. Quality.
Highest standards of quality for a long product life.

Quick start.
Individual JULABO consultation and comprehensive manuals at your disposal.

Satisfied customers.
11 subsidiaries and more than 100 partners worldwide guarantee fast and qualified JULABO support.

Services 24/7.
Around the clock availability. You can find suitable accessories, data sheets, manuals, case studies, and more at www.julabo.com.